4N-TY200GVP-SFP

L2+ManagedPoEIndustrial Ethernet Switch

LOOP ROTECTION

VLAN

6KV LIGHTING PROTECTION

Product Overview

The 4N-TY200GVP-SFP is a full Gigabit L2+ managed industrial PoE Ethernet fiber switch independently developed by CF FIBERLINK. It has 4*10/100/1000Base-TPoE ports Port 1-4 can support IEEE802.3af/at standard. Single port maximum power 30W. and 2*100/1000Base-X SFP fiber ports.

The The 4N-TY200GVP-SFP has L2+ network management function,support IPV4 static route forwarding, complete security protection mechanism, ACL/QoS policy and rich VLAN functions, easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP(<50ms) ,Support ERPS ring network function(convergence time<20ms) to improve link backup and network reliability to ensure uninterrupted communication of important applications. According to actual application needs, Routing address management,port management, port flow control, VLAN division, IGMP, security policy and other application service configurations are performed through Web, CLI, SNMP, Telnet and other network management methods. The shell is made of aluminum alloy, which has excellent industrial field environmental adaptability (including mechanical stability, climate environment adaptability, electromagnetic environment adaptability,etc.), protection level is IP40, support dual redundant power supply, low power consumption and no fan, 3 year warranty. It is suitable for industrial scenarios such as intelligent transportation, rail transit, electric power industry, mining, petroleum, shipping, metallurgy and green energy construction to establish a cost-effective, stable and reliable communication network.

FEATURE

Gigabit access, SFP fiber port uplink, Integrated Bypass function

- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Support Gigabit Ethernet port and Gigabit SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- Support physical single-mode single fiber optical path(Bypass) function, pure hardware switching, short switching time, does not affect the data transmission rate and improves the stability of the network system.

Network management and fast ring function

- STP/RSTP/MSTP.
- Static and dynamic aggregation.
- IEEE802.1Q VLAN, flexible VLAN division, Access,Trunk and Hybrid.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including EQU, SP,WRR & SP+WRR.
- IGMP Snooping V1/V2/V3 meets multi-terminal high-definition video surveillance and video conference access requirements.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, andprovide flexible and safe access control.

Security

- 802.1X authentication.
- Port isolation, storm control.
- IP-MAC-VLAN-Port binding.

Stable and reliable

- CCC, CE, FCC, RoHS.
- Low power consumption, No fan, aluminum shell.
- The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A.

One-stop remote control and management

- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose.
- Web management, CLI command line, SNMP (V1/V2/V3).

Model	4N-TY200GVP-SFP	
Interface Characteristics		
Fixed Port	4* 10/100/1000Base-T PoE ports 2* 100/1000Base-X uplink SFP slot ports 1*RS232 console por	
Ethernet Port	Port 1-4 support 10/100/1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption	
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)	
SFP Slot Port	Gigabit SFP optical fiber interface, default no include optical modules (Only supports single-mode single fiber optical module. LC)	
Wavelength/Distance	multimode: 850nm 0~550M,1310nm 0~2KM single mode: 1310nm 0~40KM， 1550nm 0~120KM	
Chip Parameter		
Network Management Type	L2+	
Ring network	Supports ERPS ring network function, with a maximum number of rings of 5 and a convergence time of<20ms	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-X, IEEE802.3z 1000Base-X, IEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	12Gbps	
Buffer Memory	8.92Mpps	
MAC	8K	
LED Indicator	PowerIndicatorLight	P：1 Green
	Fiber Indicator Light	F：1 Green (Link,SDFED)
	On the PoE seat	Yellow:Indicate PoE
		Green: Indicates network working status
Reset Switch	Yes, Press and hold the reset switch for 5s and release it to restore the factory settings	

PoE characteristics	
power supply	DC：52V
PoE power supply method	Supports 1,2+, 3,6-power supply
PoE output power	Each port has a power supply of 15.4W and a maximum power of 30W per port
Certification & Warranty	
Lightning Protection	Lightning protection: 6KV 8/20us, Protection level: IP40 IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80~1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4-10(damped oscillation):30A/m 1MHz IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV IEC61000-4-16(common-mode transmission):30V; 300V, 1s FCC Part 15/CISPR22(EN55022):Class B IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration), IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Physical Parameter	
Operation TEMP /Humidity	-40~+75°C;5%~90% RH Non condensing
Storage TEMP /Humidity	-40~+85°C;5%~95% RH Non condensing
Dimension (L*W*H)	172mm*145mm*55mm
Installation	Desktop, DIN rail

L2 functions	
Port configuration	Auto-negotiation Flow Control Port Mirror: TX/RX/BOTH; Many-to-1 monitor Traffic statistics
Link Aggregation	Static link aggregation LACP Algorithm based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	Aging Time Static MAC address Dynamic MAC address management
VLAN	4094 Active VLANs 4094 VID 802.1Q Tag VLAN Port VLAN Protocol VLAN MAC VLAN Voice VLAN 802.1ad Q-in-Q tunneling Private VLAN (Protected port) GARP/GVRP
ACL	256ACLs L2, L3 e L4 Time-based ACL
Spanning tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP) 802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter
Ring Protection	<20ms G.8032 ERPS Ring
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN
QOS	port-based CoS 802.1p-based CoS DSCP-based Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port
DHCP	SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups WEB (HTTP/HTTPS) CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration Backup/Reload Dual Firmware LLDP

Security Features	Port Security MAC address filter ARP Association (Manual, ARP scanning, DHCP snooping) ARP Protection DoS (Denial of Service) Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type; 802.1x Authentication (port-based e MAC-based) TACACS/TACACS+ Authentication RADIUS Authentication DHCP Filter Guest VLAN SSLv2/SSLv3/TLSv1 SSHv1/SSHv2 Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection
Other Features	DNS Client DHCP Relay DHCP Client DHCP Snooping DHCP Option 82 SNTP Client UDLD
PoE management	Soft-Reboot PoE Non-stop Total PoE Per port PoE function enable/disable PoE classification detection PD alive check PoE schedule
Maintenance	Cable Diagnostics Ping SFP DDM(Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring
L3 functions	IPV4 Equal Cost Routing NG protocol, maximum 1000 entries ARP protocol, maximum 1000 entries Pingv6, Telnetv6, TFTPv6, DNSv6, ICMPv6 IPV4/IPV6 VRRP, the maximum group is 255 IPV4/IPV6 VLANIF interface supports up to 128 IPV4/IPV6 static route/default route supports up to 128 entries L3 network management function, IPV4/IPV6 dual-stack management Layer 3 routing and forwarding, support communication between different network segments and different VLANs

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